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Helsinki
Helsingfors 11th March, 1959

Professor J. Lederberg
Department of Genetics
School of Medicine
Stanford University
Stanford, California

Dear Professor Lederberg,

Thank you for the kind greeting from Stockholm last December.

I have been informed that a fellowship has been awarded to me for research work at Stanford University. Thus I can confirm our agreement on my part. As soon as possible I shall let you know the sheduled day of arrival in September.

Dr. Ensgraber has written to me and described the technique used by him when he studied the glycosidase activity of lectin preparations. A copy of the letter is enclosed. I also enclose a manuscript which describes the ability of lectins to differentiate between α and β glycosides. We have continued these experiments by studying germinating seeds of Pisum sativum (containing a lectin which is inhibited by α-glucosides) and Laburnum alpinum (contains a lectin which is inhibited by β-glucosides). The seeds were ground and extracted with 0.1 M phosphate buffer, pH 5.9. The centrifuged extract (one part) was mixed with 1 % aqueous sugar solution (five parts) and the mixture incubated at 37° for 48 hours. Both extracts splitted maltose (α-glucoside) but not cellobiose (β-glucoside).

The above results seem not to support the view that lectins and glycosidases have connections. However, I should very much like to continue this line at Stanford if possible. The bacterial glycosidases and hemagglutinins would be especially interesting.

With kind regards,

Sincerely yours

Olavi Mäkelä

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